



Air Force Research Laboratory | AFRL

Science and Technology for Tomorrow's Aerospace Forces

Success Story

FOUR MATERIALS AND MANUFACTURING DIRECTORATE PEOPLE RECOGNIZED BY THE AFFILIATE SOCIETIES COUNCIL FOR OUTSTANDING ACHIEVEMENTS



The selection of four scientists for Affiliate Societies Council (ASC) awards recognizes the high degree of dedication, professionalism, and outstanding contributions of the men and women of the Materials and Manufacturing Directorate. The combined efforts of Dr. Jata, Dr. Nicholas, Mr. Rapson, and Mr. Woody (pictured left to right) supported and strengthened Air Force operational requirements and helped make the nation's commercial industries more internationally competitive.

Their selection greatly enhances the directorate's reputation as a world leader in materials and manufacturing research and development for the Air Force and the nation. The recognition of these four scientists represents a total of 57 individuals in the directorate who were recognized for their contributions by the ASC over the past 40 years.



Air Force Research Laboratory
Wright-Patterson AFB OH

Materials and Manufacturing
Awards and Recognition

Accomplishment

The ASC of Dayton, Ohio, recognized Dr. Kumar V. Jata, Dr. Theodore Nicholas, Mr. Robert L. Rapson, and Mr. William R. Woody from the directorate for outstanding achievements during their careers that helped strengthen national defense and enabled greater US global competitiveness. The ASC, comprised of representatives from about 50 engineering and science-related professional societies, has a combined membership exceeding 15,000.

Background

Every year, the ASC of Dayton, Ohio, recognizes engineers and scientists from throughout the Dayton (Miami Valley) region for outstanding accomplishments in their field. Four of the 11 individuals honored in 2002 are from the directorate.

Dr. Jata is a senior engineer and technology development leader for metals in the directorate's Metals, Ceramics, and Nondestructive Evaluation Division. For nearly 30 years, he has made significant fundamental contributions to the state of art in materials science that span from ion implantation, dislocation dynamics, crack growth, and fracture and fatigue, including groundbreaking research in structure-processing-property relationship in aluminum-lithium alloys.

Dr. Nicholas is a senior scientist in the area of High Temperature Materials Life Prediction and is responsible for the directorate's status as an international center of excellence in life prediction of structural materials. He introduced new methods for dealing with material behavior under high-cycle fatigue (HCF) and significantly advanced the basic understanding of the role of prior damage in HCF of materials. HCF is the major cause of failures in Air Force turbine engines.

Mr. Rapson is chief of the Nonmetallic Materials Division, where he leads more than 100 military and civilian scientists, engineers, and staff and provides technical direction for over \$100M per year of research programs. He is the Air Force lead on the Department of Defense (DoD) Reliance Materials and Processes (M&P) Panel that advocates and plans the course of DoD-wide research and development for M&P.

Mr. Woody is chief of the Survivability and Sensor Materials Division and has a current staff of over 70 government employees and 85 on-site contractors, visiting scientists, and students with an annual budget in excess of \$50M. He is the nation's foremost expert on laser hardening.

Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (02-ML-08)